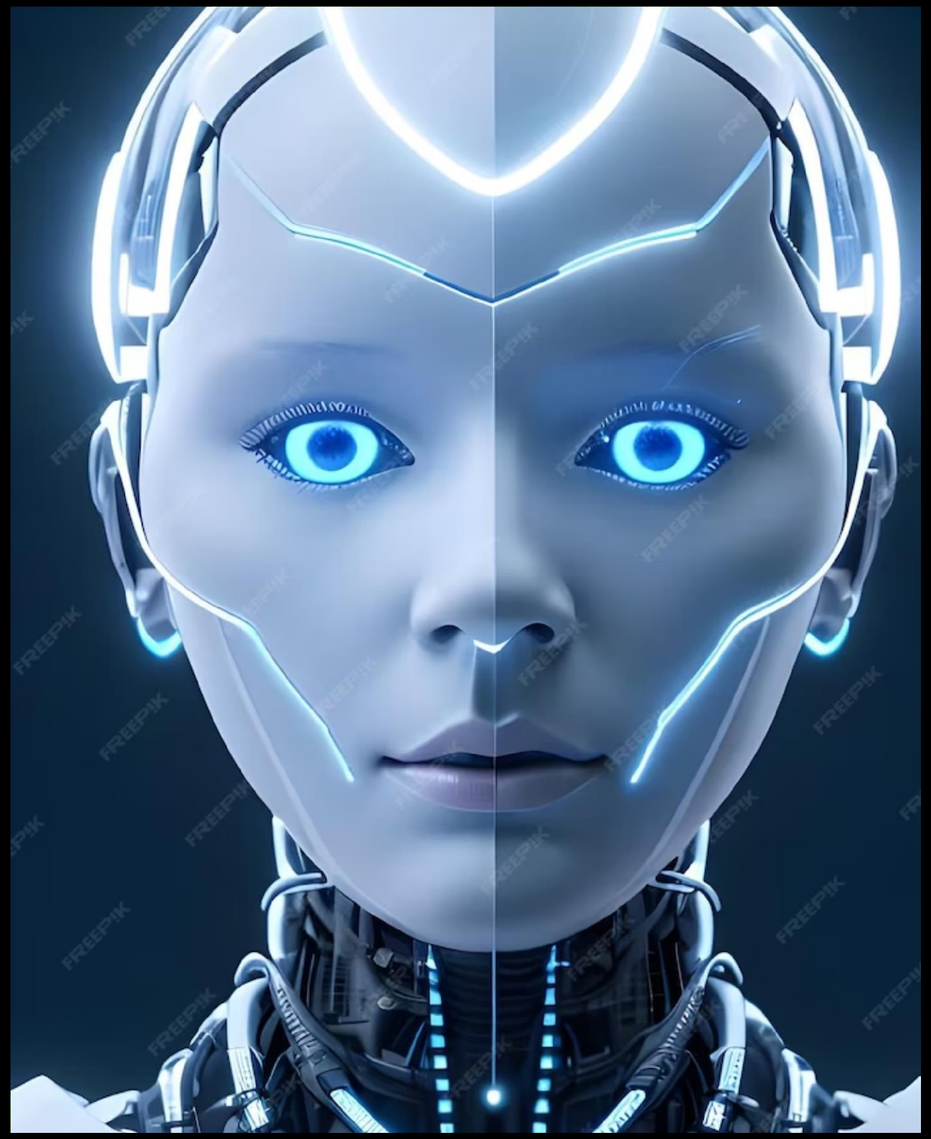
Phase 3:

AI-driven exploration and prediction for company registration trends with register of companies



Introduction

Unleashing the Power of AI:

Building a dataset for exploring and predicting company registration trends using registrar of companies

- trends Company registration of Companies Register

Data Collection:

Collecting data from register of companies and organizing information such as company names, registration dates and industry classifications. This dataset forms the foundation for uncovering valuable insights and trends.

Predicting future trends:

By leveraging AI techniques, we can analyse the dataset to identify patterns, growth areas, and emerging industries. This exploration enables us to make informed decisions and anticipate future market dynamics.

By using machine learning algorithms, we can train models on the dataset to forecast and predict future trends. This predictive capability empowers organizations to proactively adapt and stay ahead in a dynamic business environment.

Code:

```
import pandas as pd import matplotlib.
pyplot as plt data=
pd.read_csv(“company_data.csv”)
data[‘registration_date’]=pd.to_datetime(data[‘registration_date’])
data.set_index(‘registration_date’,inplace=true)
```

```
data['company_count'].plot() plt.title('Company Registration
Trends') plt.xlabel('Year')
plt.ylabel('Number of Registrations') plt.show()

from sklearn.model_selection import train_test_split from
sklearn.ensemble import RandomForestRegressor from
sklearn.metrics import mean_squared_error
x=data[['feature1','feature2']] y=data['company_count']
x_train,x_test,y_train,y_test = train_test_split(x, y, test_size=0.2, random_state=42) model = RandomForestRegressor(n_estimators=100, random_state=42) model.fit(x_train, y_train) y_pred = model.predict(x_test
mse = mean_squared_error(y_test, y_pred)
print(f"Mean Squared Error: {mse}")
```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Conclusion

Building a comprehensive dataset from the **Register of Companies** and harnessing the power of AI enables organizations to gain valuable insights, explore trends, and make informed decisions. Embracing this approach unlocks the potential for success in the ever-evolving business landscape.